Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for transmitting a WDM signal:

modulating a first optical signal on a first wavelength with a first data signal having a first data rate to generate a first modulated optical signal having a first bandwidth;

modulating a second optical signal on a second wavelength with a second data signal having a second data rate to generate a second modulated optical signal having a second bandwidth, said second bandwidth being greater than said first bandwidth and said WDM signal comprising said first modulated optical signal and said second modulated optical signal; and

applying error correction coding to said first and second data signals ~~signal so~~ such that said second data signal experiences a greater coding gain than said first data signal.

Claim 2 (original): The method of claim 1 wherein said error correction coding comprises Reed-Solomon coding.

Claim 3 (original): The method of claim 2 wherein said Reed-Solomon coding comprises coding in accordance with the G.975 standard.

Claim 4 (original): The method of claim 2 wherein said Reed-Solomon coding comprises coding in accordance with the G.709 standard.

Claim 5 (original): The method of claim 1 wherein said first data signal comprises an OC-48 signal and said second data signal comprises an OC-192 signal.

Claim 6 (original): The method of claim 1 further comprising:

multiplexing said first modulated optical signal and said second modulated optical signal together to form said WDM signal.

Claim 7 (original): The method of claim 1 wherein said first modulated optical signal and said second modulated optical signal have substantially similar power levels when multiplexed together.

Cancel Claim 8 (original): The method of claim 1 wherein no error correction coding is applied to said first data signal.

Claim 9 (currently amended): A method of receiving a WDM signal, said method comprising:

demodulating a first modulated optical signal derived from said WDM signal to form a first recovered data signal, said first modulated optical signal having a first bandwidth;

demodulating a second modulated optical signal derived from said WDM signal to form a second recovered data signal, said second modulated optical signal having a second bandwidth greater than said first bandwidth; and

decoding said first and second recovered data ~~signal~~ signals in accordance with an error correction coding scheme wherein said error correction coding scheme of said second recovered data signal compensates for a lower signal to noise ratio of said second modulated optical signal relative to said first modulated optical signal.

Claim 10 (original): The method of claim 9 wherein said error correction coding scheme comprises a Reed-Solomon encoding scheme.

Claim 11 (original): The method of claim 10 wherein said Reed-Solomon coding scheme comprises a G.975 encoding scheme.

Claim 12 (original): The method of claim 10 wherein said Reed-Solomon coding scheme comprises a G.709 coding scheme.

Claim 13 (original): The method of claim 9 wherein said first recovered data signal comprises an OC-48 signal and said second recovered data signal comprises an OC-192 signal.

Claim 14 (original): The method of claim 9 wherein said first modulated optical signal and said second modulated optical signal are received with substantially similar power levels.

Cancel Claim 15 (original): The method of claim 9 wherein said first recovered data signal is not encoded for error correction.

Claim 16 (currently amended): A WDM transmission system comprising:

a first transmitter generating a first modulated optical signal that has been modulated with a first data signal;

a second transmitter generating a second modulated optical signal that has been modulated with a second data signal;

a first error correction coding block that applies an error correcting code to said first data signal prior to modulation; and

~~an~~ a second error correction coding block that applies an error correcting code to said second data signal prior to modulation so that a coding gain of said second modulated optical signal is greater than any coding gain of said first modulated optical signal.

Cancel Claim 17 (original): The WDM transmission system of claim 16 wherein said first data signal experiences no error correction coding.

Claim 18 (original): The WDM transmission system of claim 16 wherein said error correcting code comprises a Reed-Solomon code.

Claim 19 (original): The WDM transmission system of claim 16 wherein said error correction coding block operates in accordance with standard G.975.

Claim 20 (original): The WDM transmission system of claim 16 wherein a bandwidth of said second modulated optical signal is greater than a bandwidth of said first modulated optical signal.

Claim 21 (original): The WDM transmission system of claim 16 further comprising:

a first amplifier that amplifies said first modulated optical signal; and

a second amplifier that amplifies said second modulated optical signal, wherein amplified power levels of said first modulated optical signal and said second modulated optical signals are substantially similar.

Claim 22 (original): The WDM transmission system of claim 21 further comprising:

a multiplexer that combines said first modulated optical signal and said second modulated optical signal to form a WDM signal.

Claim 23 (original): The WDM transmission system of claim 21 wherein said first data signal comprises an OC-48 signal and said second data signal comprises an OC-192 signal.

Claim 24 (currently amended): A WDM receiver system comprising:

a first optical receiver that recovers a first recovered data signal from a first modulated optical signal on a first wavelength;

a second optical receiver that recovers a second recovered data signal from a second modulated optical signal on a second wavelength;

a first error correction decoding block that decodes said first recovered data signal in accordance with an error correcting code imposed on data of said first recovered data signal; and

~~an~~ a second error correction decoding block that decodes said second recovered data signal in accordance with an error correcting code imposed on data of said second recovered data signal, said error correcting code compensating for a lower signal to noise ratio of said second modulated optical signal compared to said first modulated optical signal.

Claim 25 (original): The WDM receiver system of claim 24 wherein said first recovered data signal comprises an OC-48 signal and said second recovered data signal comprises an OC-192 signal.

Cancel Claim 26 (original): The WDM receiver system of claim 24 wherein said first recovered data signal has no error correcting code imposed on it.

Claim 27 (original): The WDM receiver system of claim 24 wherein said second modulated optical signal has a greater bandwidth than said first modulated optical signal.

Claim 28 (original): The WDM receiver system of claim 24 wherein said error correcting code comprises a Reed-Solomon code.

Claim 29 (original): The WDM receiver system of claim 24 wherein said error correcting code is in accordance with standard G.975.

Claim 30 (original): The WDM receiver system of claim 25 wherein said error correcting code is in accordance with standard G.709.

Claim 31 (original): The WDM receiver system of claim 24 wherein said first modulated optical signal and said second modulated optical signals are received with substantially similar power levels.

Claim 32 (currently amended): Apparatus for transmitting a WDM signal:

means for modulating a first optical signal on a first wavelength with a first data signal having a first data rate to generate a first modulated optical signal having a first bandwidth;

means for modulating a second optical signal on a second wavelength with a second data signal having a second data rate to generate a second modulated optical signal having a second bandwidth, said second bandwidth being greater than said first bandwidth and said WDM signal comprising said first modulated optical signal and said second modulated optical signal;

means for applying error correction coding to said first data signal; and

means for applying error correction coding to said second data signal so that said second data signal experiences a greater coding gain than said first data signal.

Claim 33 (currently amended): Apparatus for receiving a WDM signal, said method comprising:

means for demodulating a first modulated optical signal derived from said WDM signal to form a first recovered data signal, said first modulated optical signal having a first bandwidth;

means for demodulating a second modulated optical signal derived from said WDM signal to form a second recovered data signal, said second modulated optical signal having a second bandwidth greater than said first bandwidth;

means for decoding said first recovered data signal; and

means for decoding said second recovered data signal in accordance with an error correction coding scheme wherein said error correction coding scheme of said second recovered data signal compensates for a lower signal to noise ratio of said second modulated optical signal relative to said first modulated optical signal.